U.S. Census Bureau Responses to the Recommendations of the Census Advisory Committee of Professional Associations Made as a Result of the Meeting on October 20-21, 2005

Recommendation 1

Census Bureau Update

American Statistical Association Advisory Committee

"The American Statistical Association Advisory Committee (ASA/AC) is encouraged by the Director's dedication to maintaining high quality statistical research at the Census Bureau. The idea of contracting with outside experts should help achieve this goal."

Census Bureau Response

The Census Bureau continues to place a high priority on maintaining a quality statistical research program and will update advisory committee members on Census Bureau research problems at the spring meeting.

Recommendation 2A

Privacy/Confidentiality Update

American Statistical Association Advisory Committee

"The ASA/AC is enthusiastic about the Privacy Officer function. One area for consideration is whether to create a formal Institutional Review Board (IRB) within the Census Bureau, given that the federal regulation outlining protection of human subjects in research (Title 45, Code of Federal Regulations, Section 46) defines 'research' as 'a systematic investigation ... designed to develop or contribute to generalizable knowledge.' Accordingly, and distinct from privacy and confidentiality considerations, it might be appropriate to review protocols for visits of census enumerators and for recruitment of human subjects in surveys and censuses."

Census Bureau Response

Title 15 CFR Subtitle A, Part 27—Protection of Human Subjects—states that application of the Common Rule (and by extension IRB review and approval) does not apply within the Department of Commerce to "research activities in which the only involvement of human subjects will be...(r)esearch involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior...if federal statute requires, without exception, that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter." Given the confidentiality protections under Title 13, the Census Bureau has focused, instead, on our extensive and detailed procedures in place to ensure that respondents in all censuses and surveys

are treated appropriately. Our Privacy Principles—Confidentiality, Openness, Respect, and Necessity—extend beyond our legal obligations and address many of the ethical considerations of an IRB. Internal review procedures provide sound confidentiality protections for Census Bureau surveys. These include: data disclosure avoidance review practices; examination and evaluation of privacy policies and practices; individual privacy protections, and standards for informed consent, as required by the Privacy Act and the Paperwork Reduction Act. In addition, our Reimbursable Policy takes into consideration the amount of risk associated with proposed new research projects.

Recommendation 2B

Privacy/Confidentiality Update

Population Association of America Advisory Committee

"The Population Association of America Advisory Committee (PAA/AC) commends the Census Bureau's efforts to strike an appropriate balance between legal obligations, privacy and confidentiality requirements, and other needs and responsibilities, including its key role in collecting data and producing data products for end-users.

In order to facilitate its role as adviser to the Census Bureau, the PAA/AC requests that results from the Census Bureau's efforts in privacy and confidentiality (particularly the March 2005 *Ad Hoc* Meeting on Privacy and Data Use) be made available to PAA/AC members.

- A. Whereas many users of census data must communicate with Institutional Review Boards (IRB) regarding the human subject protections of public use data, the PAA/AC recommends that the Census Bureau posts on its Web site a brief justification for the exempt status of its public use data from full human subjects' research review.
- B. The PAA/AC strongly recommends that the Census Bureau remain sensitive to the implications of co-operating with data requests from law-enforcement agencies. In so far as the Census Bureau is perceived as providing data that can be used by agencies to target populations of interest to them, such as undocumented immigrants, the willingness of the public to participate in the census, the American Community Survey (ACS), and other surveys could well be eroded. The full co-operation of the public is clearly essential to collection of high-quality data."

Census Bureau Response

The Census Bureau intends to share plans for assessing its current state of knowledge about issues raised during the Privacy and Data Use Workshop at the Spring 2006 meetings of the advisory committees.

A. The Census Bureau will place a statement similar to the following on its Web site:

"Title 15 CFR Subtitle A, Part 27–Protection of Human Subjects–states that application of the Common Rule (and by extension IRB review and approval) does not apply within the Department of Commerce to "research activities in which the only involvement of human subjects will be...(r)esearch involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior...if federal statute requires, without exception, that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter." Given the confidentiality protections under Title 13, the Census Bureau has focused, instead, on our extensive and detailed procedures in place to ensure that respondents in all censuses and surveys are treated appropriately. Our Privacy Principles—Confidentiality, Openness, Respect, and Necessity—extend beyond our legal obligations and address many of the ethical considerations of an IRB. Internal review procedures provide sound confidentiality protections for Census Bureau surveys. These include: data disclosure avoidance review practices; examination and evaluation of privacy policies and practices; individual privacy protections, and standards for informed consent, as required by the Privacy Act and the Paperwork Reduction Act. In addition, our Reimbursable Policy takes into consideration the amount of risk associated with proposed new research projects.

B. Provided that the confidentiality of its data is protected, the Census Bureau does not attempt to control the uses or users of its products. Under the recently implemented policy governing the production of Custom Tabulations¹, the Census Bureau will publicly identify any requesters of custom data products. In addition, those same products will be available to other users upon request. This policy is in keeping with the Census Bureau's commitment to openness and transparency in fulfilling its mission to collect, tabulate, and disseminate data about the Nation's people and its economy, while protecting the confidentiality of all respondents. We recognize that the public's cooperation is central to our ability to collect quality data -- we strive to sustain that cooperation by effectively communicating about the data we collect, the products we produce, and the measures we

¹For the purpose of this policy, a custom tabulation is: 1) a statistical aggregation of confidential data, collected under the authority of Title 13, that are developed from internal Census Bureau files that are not accessible by the public; or 2) the reorganization of an existing Census Bureau data product by staff, requiring either (a) a significant effort or (b) access to files, including underlying source files, that are not easily manipulated by notice of casual data users. Custom tabulations result in new tangible data products prepared to meet specific data use needs of the requester and must meet the Census Bureau's disclosure avoidance requirements.

implement to protect confidentiality in all cases.

Recommendation 3A

Strategic Planning and Innovation

American Economic Association Advisory Committee

"The American Economic Association Advisory Committee (AEA/AC) commends the Census Bureau on the formation of this unit and recommends that the unit consider the following:

- 1. Presentation of its planned strategy to the CACPA at a future meeting.
- 2. Expansion of Web-based interactive applications. For example
 - o Allow aggregation of county information into metro areas
 - o Add distance of commuting to time spent commuting
 - o Cross-tabulate commuting information with earnings
 - o Facilitate SIC/NAICS conversions for inter-temporal comparisons of data
 - o Facilitate comparisons over time that involve changing definitions, such as metro areas
- 3. Systematic identification of sources of lags in publication and release of data, and investigation of ways to remove bottlenecks and leverage technology to improve policy relevance of products.
- 4. Re-evaluate imputation methods and make them more transparent to users.
- 5. Continued improvement to the measure of services sector activity to make it more frequent, timely and detailed.
- 6. Reconciliation of annual and decennial poverty estimates.
- 7. In the American Housing Survey, eliminating or raising the \$350K top-code on home prices."

Census Bureau Response

The Census Bureau is exploring opportunities for expansion of Web-based interactive applications. For example, to provide information to assist counties, localities, and states experiencing economic dislocation, the Census Bureau is exploring the feasibility of integrating information from the American Community Survey (ACS), the 2002 Economic Census, and other surveys into DATA FERRETT. This action would permit us to develop a series of interactive "hot reports" providing new information to help localities and states deal with issues surrounding major economic events.

The Census Bureau is continuing to review its procedures for the publication and release of data in an attempt to streamline processes and publish data more efficiently and quickly. For example, the Census Bureau is designing a new approach to provide information on the dynamics of income, wealth, health insurance, and other key measures. This new program will replace the Survey of Income and Program Participation and provide a more timely release of information. The Census Bureau also strives to improve its imputation methods to ensure their appropriateness and effectiveness.

With the recent addition of the Service Indicator program and other advances in the services area, the Census Bureau has made significant improvements in the amount of data available. However, expansion to include additional industries and products in the service sector area is not possible due to funding restrictions.

At this time, the Census Bureau is not reviewing poverty estimates from Census 2000 and the annual surveys in an attempt to explain differences. A review is underway comparing annual poverty estimates from the ACS with estimates from the Current Population Survey (CPS). The goal of this review is to produce one set of consistent poverty measures for the Nation, the states, and smaller geographic areas using information from both the ACS and the CPS. The Census Bureau will share progress on this project with the Committee.

The Census Bureau has revised the top-code for home values in the American Housing Survey, effective in 2005 for all metro and national levels. The previous limit was \$350,000. The new approach allows respondents to write-in an estimate of their home value without any limit; and will provide a more accurate assessment of home values throughout the country.

Recommendation 3B

Strategic Planning and Innovation

American Marketing Association Advisory Committee

"The American Marketing Association Advisory Committee (AMA/AC) commends the Census Bureau for the formation of the Directorate of Innovation and Strategic Planning. The Directorate's goal, 'to stay ahead of the data needs in a fast-changing environment' is vital. The Census Bureau is recognized for having strong capabilities in the area of data acquisition, analysis, and dissemination – and there will be growing requests for additional products and services moving ahead.

In as much as new product development is a high-risk venture, the AMA/AC recommends that the Census Bureau use a systematic process for product development with emphasis on end-user needs. The AMA/AC would welcome an opportunity to gain perspective on the new product development process that is being used. Specific areas include:

- o How both current and potential target audiences (customers) are identified and defined?
- o How are these target audiences' interests being explored?
 - o User groups (defined by product) are an extremely efficient and effective means of gaining access to customer insights (see Recommendation #12A)
- o How are new products proposals invited, reviewed, and selected for development relative to customer segment needs and available resources?
- o What are the performance criteria in the development phase and once in use (in market)?
 - o In development, what methods of information gathering are being used to design the products to fit user requirements?
 - o How are these ideas being tested to be sure that these products meet consumer needs?

Once in the market, what are the performance criteria (for example, the LED project)? How do you define success? What is the process for making product improvements?"

Census Bureau Response

We have identified and met with a number of current Census Bureau stakeholders, customers, Congressional staff members, and other interested parties. The current strategy for identifying and selecting areas for new product development or the enhancement of current projects has been totally "user focused." For example, the Economic Dislocation initiative will provide interactive data to states and localities to assist in dealing with economic events, such as military base or manufacturing plant closings.

The Census Bureau is also forming a quick response team to address other federal agencies, states, and localities need for information during and after natural disasters. This proactive approach will permit us to design information products that can be produced for specific geographic areas.

The Census Bureau will continue to explore possibilities for improving its products to meet the changing needs of the Nation. However, the extremely tight fiscal environment, which makes it necessary for the Census Bureau to enhance existing products and develop new products with existing resources, limits the number of activities that can be undertaken at this time.

Recommendation 3C

Strategic Planning and Innovation

American Statistical Association Advisory Committee

"The ASA/AC congratulates Nancy Gordon on her new leadership role in strategic planning and innovation. We encourage efforts to identify 'low hanging fruit' so that progress can be seen in the short term. We also encourage a longer-term vision to guide and prioritize the numerous future suggestions that will be received to address issues, such as the use of administrative records in census-taking, that may require a longer time frame than a decennial period.

The Census Bureau has many diverse and specialized user communities, and the ASA/AC supports the institutionalization of a Strategic Planning Directorate that will more carefully consider the needs of these communities. Some potential areas for new Bureau initiatives that the Directorate might consider include: 1) exploring the possibility of providing data at other new levels of aggregation, 2) considering how census data might be used to assist in planning to cope with future man-made and natural disasters; and relatedly, 3) exploring the possibility of a program to produce statistics on displacement of individuals in our society.

The ASA/AC commends the Census Bureau for its openness to the idea of producing redistricting data with as much detail as possible on type of group quarters, such as distinguishing populations in federal, state, and local correctional facilities. We urge the Census Bureau to maintain a consumer-oriented focus to allow policymakers across levels of

government the greatest possible flexibility in tailoring diverse programs to distinctions in population subgroups that might be sensitive to group quarter definitions.

The Census Bureau seems to expect that there will not be any new money for strategic investments. The ASA/AC recommends that the Census Bureau consider creative ways of generating funding internally that could be used for these new investments."

Census Bureau Response

The Census Bureau is moving forward to adopt suggestions that will permit new levels of aggregation of data and address the needs of communities dealing with natural or man-made disasters. For example, the Census Bureau is exploring the possibility of integrating data from a number of sources (the American Community Survey, the 2002 Economic Census, County Business Patterns, and administrative records) into DATA FERRETT, which would provide users the ability to integrate information from these sources and others for areas facing economic dislocation. We are exploring funding options so that this information will be available through a series of "hot reports" to assist states, counties, localities, and the federal government as they deal with economic disruptions, such as those due to manufacturing plant or military base closings, and natural or other disasters.

The Census Bureau is also moving forward with developing more accurate daytime population estimates. Current daytime population estimates reflect the location of workers based on Census 2000. If successful, the new product will be enhanced using administrative records and other sources of information to provide more accurate and more recent information.

New techniques that permit the dissemination of more data will be tested on the Survey of Business Owners. The techniques may also be applied to additional economic surveys and to the 2007 Economic Census. That way, we expect that more information could be released, while still protecting the confidentiality of respondents.

The Census Bureau is forming a quick response team to address the need for information by other federal agencies, states, and localities during and after natural or other disasters. This proactive approach will permit us to design information products that can be produced for specific geographic areas.

Recommendation 3D

Strategic Planning and Innovation

Population Association of America Advisory Committee

"The PAA/AC commends the Census Bureau on establishing the Strategic Planning and Innovation Directorate with its mandate to develop innovative and useful data products within the context of existing data and sources of information across Census Bureau program areas.

A. The PAA/AC recommends that the new Strategic Planning and Innovation Directorate consider providing better and more comprehensive data on the foreign-born population. The percent of foreign-born has reached 12 percent of the U.S. population, the highest since the previous peak at the turn of the 20th Century. The PAA/AC is particularly interested in data that would allow the identification and study of the foreign-stock population (1st and 2nd generations), including information on legal status and improved measures of language proficiency (oral and written) in both English and other languages."

Census Bureau Response

In 2005, the Immigration Statistics Staff released a table package of the 2004 foreign-born population in the United States that includes generational status. The findings are based on data collected by the Census Bureau via the Annual Social and Economic Supplement to the Current Population Survey (CPS). They provide a profile of demographic and socioeconomic characteristics, such as age, region of birth, geographic distribution in the United States, educational attainment, earnings, and poverty status. These tables can be found at: http://www.census.gov/population/www/socdemo/foreign/pp1-176.html>.

It is a goal of the Census Bureau to release annual data about generational status, that is to say, the foreign born and their descendents, and then to provide an in-depth report. The CPS is the only survey used to produce this information, since the CPS is currently the only survey that provides information on the place of birth of the respondent's parents.

One of the goals of the Census Bureau is to produce more accurate estimates of the foreign born by legal status than had been done in the 1990s and then to select a methodology for the production of future estimates on an annual basis. Towards this end, the Immigration Statistics Staff is comparing the utility of different methods and data sets for estimates by legal status. At this time, the legal status estimates are being produced at the national level for three categories – legal permanent, legal temporary, and residual (unauthorized and quasi-legal combined). However, the factors for evaluation of methods and data sets include whether or not legal status estimates can be refined to four categories by disaggregating the residual category, and whether estimates can be obtained at the subnational level or by migrants' place of birth.

The Census Bureau's questions on language use and English ability have remained identical from the 1980 Census through Census 2000 and the current American Community Survey (ACS). As a consequence, they provide a basis for comparing information on language use over

time.

For the release of 2004 ACS data, we created new tables showing language use by citizenship status, in addition to nativity status. We also provided new tables on language and nativity status by race and ethnicity.

Although measures of written proficiency in English and other languages are not included in the ACS, data produced for other federal agencies do address this question. The National Center for Education Statistics (NCES) in the U.S. Department of Education recently released findings from the 2003 National Assessment of Adult Literacy (NAAL). This assessment provides information on literacy levels in English, along with information on basic Spanish literacy for a portion of the population. Information on this assessment is available from NCES.

B. "The PAA/AC recommends that the Census Bureau consider re-introducing the question on children ever born (CEB) that was dropped in Census 2000. This was one of the most vitally important census questions for the demographic community. Presently, it is only possible to track U.S. geographic trends in, and prevalence of, fertility using the "own children in the household" question. This question is fairly adequate for young women, but highly problematic and potentially erroneous for middle aged and older women. Given the marked differences in fertility by race and ethnicity, as well as across states and regions, more comprehensive fertility data are needed. The CEB question would provide such a measure."

Census Bureau Response

Because there was no legislatively mandated reason to collect data on CEB, this question was not included in Census 2000. However, a fertility item has been included on the ACS that asks women 15 to 50 years of age if they have had a birth in the last year. This item was included at the suggestion of local area demographers to provide them the ability to produce age-specific fertility rates for subnational areas by the characteristics of women (for example, citizenship, employment, and poverty status)—statistics not available from any current survey or the National Center for Health Statistics. In addition, information from this item provides policy makers the ability to produce current demographic profiles of mothers with newborn children for infant and maternal health programs.

C. "The PAA/AC further recommends that the Census Bureau expand the manner in which 100 percent data are published on unmarried partner households. The 100 percent data for Census 2000 are published on the Census Bureau's Web page in a single table (Table PCT 22 in Summary File 2). For various levels of geography, this table provides the number of households in which there is at least one unmarried partner 'related' to person 1. The data from this table that pertain to same-sex, unmarried-partnered households are fairly good counts of the numbers of committed gays and lesbians living in the same households. However, Table PCT 22 only gives total counts. If one needs age and/or race and Hispanic origin breakouts, the Public Use Microdata files (PUMS) must be used. If one were using the unmarried-partner data to examine heterosexual cohabitation, these data would be adequate because the numbers are sufficiently large.

However, they are not satisfactory if one is using them to assess the prevalence of samesex unmarried partnering.

Therefore, the PAA/AC recommends that the Census Bureau consider publishing other 100 percent data tables on their Web page breaking out the unmarried-household data by age, race, and Hispanic origin, as well as other major variables such as education or nativity."

Census Bureau Response

Summary File 2 provides estimates of unmarried partner households, but only by the race and Hispanic origin of the householder, not of each partner. An examination of the characteristics of unmarried-partner households by the characteristics of each partner would create sample size and confidentiality issues when displaying any data at the county level or below. Many geographical areas will have less than 50 unmarried partner households, especially when tabulating same-sex couples. For example, of the 159 counties in Georgia in Census 2000, 38 counties had 50 or more same-sex couple households of either sex. One could not reasonably construct generic cross-tabulations applicable to all geographic areas across the Nation by race, Hispanic origin, and age for Summary Files 1 or 2.

Recommendation 4A

2010 Decennial Census Program

American Statistical Association Advisory Committee

"The Census Bureau's efforts to reduce costs in data collection, such as using electronic communication to reduce follow-up expenses, are commendable, as are efforts to reduce coverage errors.

The ASA/AC recommends that the Census Bureau develop general policies to prepare for and guide actions when man-made or natural events arise that disrupt data collection. It is good to know that the Census Bureau has given some thought to contingency plans in the event of a small-scale disruption. While it is unreasonable to formulate specific scenarios and solutions in advance of an event, general policies could be used to evaluate and direct actions for specific events. It is recommended that more thought be given to statistical modeling approaches for population counts should this kind of situation arise.

The ASA/AC supports Director Kincannon's position that the American Community Survey program will be closed down, rather than suspended, should this program receive inadequate Congressional funding. Such a move would be catastrophic but necessary if the program becomes unsustainable."

Census Bureau Response

Last year's emergencies interrupted important survey collection activities, and we were not fully prepared to compensate for the interruptions. We are exploring lessons learned from those experiences, and various ways to be better prepared in the future. Changes will encompass identifying and documenting procedures that provide field representatives and Regional Office staff with alternative ways to send/receive assignments, and to transmit completed work and payroll information.

Recommendation 4B

2010 Decennial Census Program and ACS Ramp Up

Population Association of America Advisory Committee

"The PAA/AC submits the following:

- A. In order to facilitate the work of various Census Bureau advisory committees, including the Census Advisory Committee of Professional Associations (CACPA), the PAA/AC recommends that the Census Bureau provide CACPA recommendations regarding the ACS and all decennial census issues, and the Census Bureau's responses to these recommendations, to the 2010 Census Advisory Committee and in the case of race and ethnic issues, to the Race and Ethnic Advisory Committees.
- B. The PAA/AC recommends that committee members be informed, in a timely manner, of the Census Bureau's plans to obtain advice from standing and *ad hoc* committees and expert panels on issues that are of interest to the PAA/AC. Examples of issues that would be of great interest to the PAA/AC include:
 - o how to ask the questions on race and ethnicity and what choices are offered in the 2010 Decennial Census and the ACS
 - o the development and testing of census and ACS questionnaires in languages other than English
 - o potential revisions to occupational codes for the 2010 Decennial Census

In addition, the PAA/AC requests that results from standing and *ad hoc* advisory committees and panels be provided to members of the PAA/AC."

Census Bureau Response

The Advisory Committee Office will ensure that responses to recommendations made by all advisory committees are provided to each of the other advisory committees.

The Census Bureau understands your interest in our plans to obtain advice from other groups on issues that are of particular interest to your committee. To the extent possible, we will strive to keep you informed.

Recommendation 5

ACS Data Collection in Gulf Coast Areas

Population Association of America Advisory Committee

"The PAA/AC commends the Census Bureau for its response to disruptions and dislocations caused by Hurricane Katrina.

- A. The PAA/AC recommends that the Census Bureau consider devoting a segment of its Web site to data for disaster areas. One model for such a Web site is the one developed by the Center for Population Studies at the University of Mississippi (<http://www.olemiss.edu/depts/population studies/Katrina/>). Within four days after Hurricane Katrina hit the Gulf Coast, this site was created using existing census data products and software. It features user-friendly "map clickable" access to data for the impacted areas.
- B. The PAA/AC further recommends that the Census Bureau prepare county level data linked to maps similar to those on the University of Mississippi's Web site, and then move counties in and out of its disaster-area Web site as needed. The Census Bureau should also consider developing pre- and post-disaster information on the same Web site.
- C. In addition to natural and man-made disasters, large scale epidemics may pose a possible threat to Census Bureau operations and may generate distinctive data demands. Thus, the PAA/AC recommends that the Census Bureau's contingency planning include the possibility of large-scale outbreaks of infectious disease. Prior influenza pandemics in the 1950's and 1960's may have provided some experience with such disruptions.

These recommendations would also fit with the objectives of the newly-established Strategic Planning and Innovation Directorate."

Census Bureau Response

The Census Bureau has created a "hurricane" Web site link from its homepage, <www.census.gov>. This Web site features data tables, maps, and new releases relevant to the hurricane impacted areas, including state level information and information for the FEMA disaster-designated counties. In addition, there is a "map clickable" data feature entitled "Demographic Profile of Hurricane Affected Counties" available at this Web site that provides basic demographic characteristics, as well as poverty and income data and school characteristics. As we move forward and new post-disaster data become available, the Census Bureau will post these data to the Hurricane Data Web page.

The Census Bureau is working to document our response to the hurricanes in our efforts to determine the lessons learned, and we are seeking perspectives from advisory committees and other stakeholders.

Recommendation 6

MAF/TIGER Update

Population Association of America Advisory Committee

"The PAA/AC recommends that the Census Bureau provide an inventory of internal Census Bureau MAF uses to advisory committee members prior to the Spring 2006 meeting and give a presentation on these uses at that meeting. This would provide a better understanding of the multiple uses of the MAF/TIGER database for Census Bureau operations and would aid in integrating Census Bureau operations."

Census Bureau Response

The Census Bureau uses the Master Address File (MAF) in the following areas:

- o As a sampling frame for the other household surveys
- o As a sampling frame for the American Community Survey
- o As the starting point for the decennial census address list and as a repository for a final address list after the 2010 Census
- o As a tool in the population estimates program
- o As a basis for developing school district population estimates.

Recommendation 7

Evaluating the Objectives and Requirements of the Survey of Industrial Research and Development

American Economic Association Advisory Committee

"The AEA/AC agrees with the Census Bureau's recommendations and priorities, and commends the Census Bureau for undertaking the recent improvements to the Survey sample frame and for achieving better survey response rates. In redesigning the Survey of Industrial Research and Development along the lines directed by the National Science Foundation, the Committee agrees with the Census Bureau's priority to organize a data user and supplier workshop and then to complete a record keeping study. It agrees that the remaining data quality improvement activities previously planned for the Survey by the Census Bureau and the National Science Foundation are a lower priority than those activities related to the redesign of the Survey. The Committee recommends that the workshop participants give feedback at the later stages of the prescribed redesign process.

The Committee believes that the data user workshop should be held early in the Survey redesign process.

The Committee recommends that the Survey redesign incorporate an ability to link to the LEHD and the NSF Survey of Scientists and Engineers.

The Committee recommends that, in collaboration with the BEA and NSF, the Survey redesign achieve maximum feasible compatibility with international data."

Census Bureau Response

Since the Census Bureau conducts the survey under a joint partnership agreement with the National Science Foundation (NSF), we discussed your recommendations with the NSF. Both agencies agree that a data user workshop should be conducted early in the survey redesign process, prior to completing the recordkeeping study currently in progress. While there is benefit to including suppliers in the workshop, the NSF's position is to include only data users and to consult with data suppliers during the recordkeeping study. The NSF is mapping out the quality improvement activities previously planned for the survey and those related to the redesign to determine if they complement each other or if, as the Committee indicated, those previously planned are of a lower priority and will adjust the redesign activities as appropriate. The agencies agree with the Committee that the workshop participants should give feedback at the later stages of the prescribed redesign process.

The NSF agrees with the Committee's recommendation that the survey redesign incorporate an ability to link to the Longitudinal Employer Household Dynamics and the NSF's Survey of Scientists and Engineers. However, due to budget constraints, the NSF cannot pursue this now.

The agencies agree that, in collaboration with the Bureau of Economic Analysis, the survey design achieve maximum feasible compatibility with international data.

Recommendation 8

Chief Economist Update

American Economic Association Advisory Committee

"The AEA/AC commends the Census Bureau for its support of the RDC network. The Committee wishes to highlight the great research advances already made. It anticipates additional advances of similar importance. It recommends continuing investment in finding solutions that permit the network to thrive.

The Committee would like to recommend that Census:

- 1. Develop more outreach activities to help end misperceptions about proposal requirements and process.
- 2. Develop a list of Census needs that overlap with researcher interests and facilitate the development of projects that benefit both the research community and the Census Bureau.
- 3. Find an approach to submission fees that contributes to cost-recovery without discouraging incentives to submit proposals.

Also, the Committee recommends outreach to other federal agencies to offer the services of the RDC networks to allow academic researchers to access confidential non-Title 13 data for research purposes. This will require creating a separate proposal process and educating the research community about data availability.

The Committee has not reached a conclusion about the need for a lead institution. We believe alternative institutional arrangements need more study.

The Committee recognizes the IRS concerns as well as the negative reaction of the research community to the lengthy review process. The Committee supports Census for Economic Studies' efforts to find constructive measures to make the process quicker and more predictable, as well as to support as many projects as feasible.

The Committee commends CES staff for developing new approaches to measuring economic damage from Hurricane Katrina and Rita. The Committee recommends exploring the general lessons for CES from these events - e.g., the staff explore the feasibility of attaching longitude and latitude to the establishments in the business register."

Census Bureau Response

The Census Bureau , working with its Research Data Center (RDC) partners, is increasing outreach efforts to the research community. The Census Bureau approached the RDC partners about instituting fees for proposal submission. The partners felt that this would only serve to dampen demand for RDC services. The partners have also rejected a per-project fee and have asked to look at alternatives for covering ongoing hardware and software costs. The CES is developing a list of projects of mutual interest to the Census Bureau and the research community.

The CES continues to work with other offices within the Census Bureau and other agencies to try to further develop the tools needed to quickly respond to events, such as hurricanes with information on the affected areas.

Recommendation 9A

Communications Planning for the 2010 Census

American Marketing Association Advisory Committee

"The AMA/AC members appreciate the Census Bureau's responsiveness in placing the marketing communications roadmap for the 2010 Decennial Census on the agenda. The roadmap recognizes the complex marketing activities that must be undertaken to ensure a successful census. Members of the AMA/AC remain ready to provide an outside perspective on these activities as needed. Additionally, as we approach the 2010 Census, we recommend that marketing communications be kept on the agenda for the semi-annual meetings of the Census Advisory Committee of Professional Associations.

As this roadmap develops into a marketing plan, the AMA/AC supports the Bureau's efforts to:

- o Summarize and incorporate learning from the 2000 Decennial Census.
- o Undertake research to validate new features of the 2010 Census and to test

- consumer attitudes in areas that have likely experienced change (i.e., privacy issues).
- o Identify known market segments that are significantly more likely to have high non-response rates based on the ACS survey as well as the 2000 Census. These may include ethnic groups and Native Americans, low literacy groups, low-income groups, homeless, and others.

Recommendation 9A (a): The roadmap presented covered many tasks in the development of the integrated communications leading up to the Decennial Census. It did not provide detail on the specific research planned to develop, pretest, and market test the communication initiatives.

The AMA/AC recommends that specific quantitative tests be planned and included in the roadmap for campaign pretesting and tracking."

Census Bureau Response

The Census Bureau agrees that an effective, integrated 2010 communications program must include research, testing, and evaluations throughout the process. It is our plan that the development and testing of communications initiatives, such as audience segmentation, messaging, avenues of distribution, etc., for the 2010 Census will be a major component of the Census Bureau's communications contract that will be awarded in 2007. The Census Bureau—specifically the Communications, Field, and Decennial Directorates—would be very interested to learn more from the Committee about what types of quantitative research would be helpful, as we are now in the process of defining the overall scope of the 2010 Census Communications Campaign contract.

Recommendation 9A (b): "The 2010 Decennial Census will require development of an integrated marketing program using a variety of marketing tools to target specific market segments. In addition to advertising and public relations, partner programs (where the partner has a developed channel of communications with census target groups) provide an opportunity to develop programs with high credibility and focused messaging. The Census has planned to develop targeted programs to reach, educate, and involve these partners in the Decennial Census efforts. The AMA/AC recommends that these partner programs be formally tested with the partners who participated in the 2006 and 2008 Census Tests."

Census Bureau Response

The Census Bureau agrees that it is critical to work with prior and current census partners to learn how we can improve programs and strategies to better reach and motivate their particular constituents/communities. To date, research has been conducted with Census 2000 partners that worked on the faith-based, rural, and Complete Count Committee initiatives. As we continue planning for the 2010 Census, we will assess the effectiveness and note areas for improvement for programs used in the 2004 Census Test, the 2006 Census Test, and the 2008 Dress Rehearsal, such as the Tribal Liaison Program, working with recent immigrants, migrant workers, student

populations, and the linguistically-isolated, to name a few. The information we are able to gain from our partners will go a long way to ensure we are developing a program for the 2010 Census that reaches the right people with the right messages through the right vehicles.

Integration is key to having a successful communications plan and to ensuring a unified message and strategy. The Census Bureau has been developing a realignment of offices responsible for external stakeholder communications. The Communications Directorate has been expanded to include the Customer Liaison Office, the Advisory Committee Office, and the Marketing Services Office. This centralization of communications functions under one directorate, which also includes the Public Information Office and the Congressional Affairs Office, will permit greater cross-program coordination, integration, and synergies. In addition, it creates many efficiencies as we approach the 2010 Census.

Recommendation 9A (c): "The AMA/AC recommends that the Census Bureau schedule a review of the Roper opinion trend research at the next CACPA meeting. Specific topic areas could include (1) consumer attitude trends by segment regarding the Census or privacy issues and/or (2) the ability to add specific questions to the Roper study to track relevant consumer attitudes. This action will help the CACPA to better understand the challenges facing the integrated communication program."

Census Bureau Response

Currently, there is one question related to the Census Bureau on the Roper study that tries to get at attitudes about government in general. Specifically, the question asks how respondents feel about various federal agencies. Since overall attitudes will play a significant role in message development for the 2010 Census, we would appreciate the opportunity to have a small group discussion with members from the AMA/AC that reviewed current Roper results. We will also review ways to better utilize that instrument.

It is the Census Bureau's plan to require the bulk of this research and the development of audience segmentation models to be within the scope and requirements of the 2010 Communications Campaign contract.

Recommendation 9A (d): "The AMA/AC urges the Census to integrate the branding and graphics promoting the Decennial Census with those of the existing Census brand in order to achieve synergies and realize the overall objectives of the Bureau. It will also be imperative to integrate communication and branding efforts across the Census Bureau itself, i.e., Communication, Marketing Services Office, Decennial, ACS."

Census Bureau Response

The Census Bureau requires that all internal and external documents adhere to its corporate identity standards. These standards ensure the ongoing branding of the Census Bureau name and image on all products. They also ensure a consistent look and feel—so that the Bureau is "speaking with one voice."

Recommendation 9B

Communications Planning for the 2010 Census

American Statistical Association Advisory Committee

"The ASA/AC congratulates the Census Bureau on a comprehensive roadmap for 2010 Communications planning. In viewing that roadmap, it appears that research components appear to be clustered at the beginning and end of each decade with a gap in the middle. The Committee sees this as an opportunity lost. We encourage a continuous research track be adopted that would allow ongoing insight and learning. We also encourage the adoption of a behavioral conceptual framework that allows for research and refinement of the drivers of census participation, analogous to the cognitive response model for surveys used to develop effective strategies to increase participation.

Separate models could be developed and researched for specific subpopulations at risk for undercoverage as well as for the general population. Such research may be able to draw on nonresponse followup (NRFU) households of the American Community Survey (ACS). Participating NRFU households are assumed to be more similar to noncoverage households than non-NRFU that participate in ACS. The resulting behavioral models may prove insightful for increasing the effectiveness of outreach, partnerships and advertising campaigns."

Census Bureau Response

The Census Bureau agrees that an effective 2010 communications plan must include respondent research and audience segmentation models for the general public and subpopulations at risk for undercoverage. The development and testing of communications initiatives for the 2010 Census will be a major component of the Census Bureau's communications contract that will be awarded in 2007. The Census Bureau—specifically the Communications, Field, and Decennial Directorates—would be very interested to have further discussions with the committee about their recommended types of research, as we are now in the process of defining the overall scope of the 2010 Census Communications Campaign contract.

Recommendation 9C

Communications Planning for the 2010 Census

Population Association of America Advisory Committee

"The PAA/AC commends the Census Bureau for preparation of an informative 'Road Map to 2010 Marketing, Partnership, and Stakeholder Programs.' We believe, however, that an efficient and cost effective program of integrated communication demands research based on the identification and prioritization of sub-populations of interest. Special attention to sub-populations (i.e., with focus groups, training, consultation, and preparation of special materials) should be driven by *empirical* assessments of the extent to which such efforts will yield improvements in the response rates or data quality for specific groups.

Groups for which the greatest gains are anticipated should constitute the priority 'targets' of segmented communication strategies. Clear conceptual distinctions between targeted subpopulations, partners, and stakeholders should be drawn. Attention devoted to particular constituencies should be proportional to the anticipated payoff of such efforts.

To direct its marketing efforts efficiently and to eliminate any perception of favoritism in outreach, the PAA/AC recommends that the Census Bureau develop, and share with committee members, clear criteria for prioritizing groups for research on effective communication strategies and for marketing and communication efforts."

Census Bureau Response

The Census Bureau agrees that an efficient and cost-effective program of integrated 2010 communications must include audience segmentation research and behavioral models for the general public and subpopulations. This will permit the Census Bureau to identify and prioritize targeted populations, better plan to reach those particular audiences, and more effectively and efficiently allocate our resources. It is the Census Bureau's plan to require respondent research and the development of audience segmentation models within the scope and requirements of the 2010 Census Communications contract that will be awarded in 2007.

Recommendation 10

2007 Economic Census Expansion of Employer Costs of Fringe Benefits

American Economic Association Advisory Committee

"The AEA/AC supports Census Bureau efforts to collect detailed data on types of fringe benefits, included as part of the 2007 Economic Census. Federal statistical agencies, researchers, and policy-makers will value these data highly.

The Committee encourages the Census Bureau to consider alternative sources of data, particularly

data collected as part of the Bureau of Labor Statistics Employer Compensation Survey, and IRS form 5500. It may also be useful to contact firms that consult on designing benefits packages and collect benefits data and payroll processors.

In addition to using consistent definitions for the detailed breakout of fringe benefits across collections that are company – and establishment-based, the committee recommends that the Census Bureau continue to examine how to aggregate the fringe benefits data across establishments within companies.

The Committee agrees that the benefits from collecting these data likely exceed the additional burden to data providers. We support ongoing efforts to cognitively test the survey questions in the goods-producing sector."

Census Bureau Response

The Census Bureau contacted the staff that conducts the National Compensation Survey and the Employment Index at the Bureau of Labor Statistics (BLS). They confirmed that what the Census Bureau proposes does not duplicate what they collect. Their data reflect cost per hour worked, not aggregate annual expenditures. Also, their primary interest is in occupational data. In addition, the BLS data do not fully satisfy Bureau of Economic Analysis (BEA) requirements.

The BEA currently uses the IRS Form 5500 data for pension data. However, the data are not available until almost four years after the data year. In June 2005, the Government Accountability Office issued report GAO-05-491 that makes recommendations to IRS for shortening that time. If the IRS implements improvements, perhaps this will be a better source of pension data for BEA. Coverage of the pension data is usually considered better than coverage of the health insurance data, because companies are required to file only if they have health insurance plans with greater than 100 participants or if they self-insure. This means that most small businesses are not required to file.

We continue to refine definitions and will adopt the BLS's suggestions to replace the term "fringe benefits" with "employee benefits" to reflect contemporary terminology.

The Census Bureau agrees that it would be preferable to collect data across all industries at either the establishment or company level, rather than a mixture of each. However, we do not currently have a survey that would permit either measure for all industries, and we are not certain that respondents' records permit that. As we test these questions, we will continue to explore the ability of respondents to report these data at the establishment or company level. If we find that one or the other is advantageous for respondents, we may consider other options for future collections.

Recommendation 11A

Methodology for the Production of ACS Multi-Year Estimates

American Statistical Association Advisory Committee

"The ASA/AC understands that the American Community Survey (ACS) data are collected over time and recommends that estimates should be consistent with this perspective on period data collection. The ASA/AC further endorses the use of the most recent geographical boundaries to produce estimates. But the statistical superiority of controlling ACS estimates to mid-decade population estimates has not been justified, and we recommend that such controls not be used without justification. In this regard, our recommendation has not changed from the language of our October 2003 recommendation when we wrote that we believe 'that if the Bureau decides to use intercensal demographic projections as population controls for the American Community Survey (ACS), then the uncertainty associated with the demographic controls should be reflected in the standard errors of the estimates from the ACS. The Committee further recommends additional work on a method to evaluate the precision and accuracy of the demographic population projections. Without adequate scientific justification, the intercensal population estimates should not be used as controls.'

The ASA/AC has concerns about the proposed use of a Consumer Price Index (CPI) adjustment, partly because it is a national-level approach that could be inappropriate for local-area characteristics, and partly because the 'market basket' upon which the CPI is based, is not apt to be a valid reflection of consumption across all population subgroups.

The two options presented for producing multi-year estimates, namely a simple average of the five single year estimates, or a pooled estimate, correspond to separate and combined ratio estimates, respectively. The statistical properties of these two types of estimation, in terms of bias and variance, are well known. This would provide a framework for choosing between these two different estimates. The ASA/AC encourages the Census Bureau to carry out such an analysis.

One of the advantages stated for the pooled estimator is that it can use more updated housing and population controls. However, there is nothing to prevent the single year estimates from being revised with these updated housing and population counts and being used in the simple average. This option should be explored as well.

In line with model-based estimation in other government statistics settings, such as seasonal adjustment of unemployment time series, the ASA/AC recommends that the Census Bureau pursue a parallel research program, building on multi-level modeling ideas, for possible future use in producing small-area estimates from the ACS data. Modeling approaches could be flexible enough to incorporate administrative records at various levels of geography, if desired.

A simulation study (perhaps using an artificial population) may be considered to evaluate different estimators.

Variance estimators could be problematic event thought the ACS sample is capable of producing

reliable point estimators. They may have small bias but could be highly unstable in terms of variance estimators."

Census Bureau Response

We agree with the committee's recommendation that the Census Bureau conduct additional research on housing unit and population estimates and their use as controls in the ACS weighting process. We do not agree with the recommendation to discontinue using these controls to produce ACS estimates, especially the 2005 and 2006 ACS single-year estimates.

The single-year estimates are restricted to certain population thresholds, and all data tables are subject to data reliability release rules. These estimates are generated for larger population areas (65,000 population), which are not as likely to have the most extreme relative measures of bias and seasonality. In addition, the estimation areas (county or groups of counties) formed for the single-year estimation process must contain about 40,000 or more in population. Therefore, the weighting methods for single-year estimates are not using the detailed demographic population estimates separately for the smaller counties. The 3-year estimates are similar to the single-year estimates in that they are restricted to areas of 20,000 population or larger, and they are subject to data reliability release rules. In contrast, the 5-year estimates are generated for all levels of geography down to the tract and block-group levels, and the tables are not subject to data reliability release rules. We believe that it is these estimates that are more likely to be impacted by the choice of controls.

It is our belief that the use of population and housing controls, in general, will improve the accuracy of the ACS estimates. This is mainly in terms of variance reduction and is supported by the research results in Starsinic (2005). We agree that these variance reduction measures should be more comprehensively researched and that more should be done to understand any potential biases introduced through the use of the controls. This is especially needed for smaller geographic areas, where there is greater potential for larger relative biases in the population estimates.

Our research priorities in 2004 and 2005 involved resolving weighting and estimation issues critical to the production of single-year estimates in 2005 for the United States and Puerto Rico and for the production of single-year estimates in 2006, which reflect data collected from the population living in Group Quarters. For 2006 and 2007, our research plans include four major components that address issues relating to the use of population and housing controls. They include assessments of the accuracy (reliability and bias) of alternative weighting procedures, measures of the quality of the official population estimates, research to address seasonality implications, and usability research to assess the user issues associated with having ACS estimates that may be inconsistent with official population estimates. Each of these is described in more detail below.

• Alternative weighting procedures under consideration involve the use of housing controls and the use of population controls at alternative levels of geography (e.g., county, groups of counties, or state) and demographic detail (e.g., full detail, collapse some dimensions, or total population only). In order to assess the impact on the accuracy of ACS estimates from a mean squared error perspective, we would be measuring the impact on reliability (variances increasing or decreasing) and potential biases (sensitivity analysis

or the use of other independent means).

- The Census Bureau will undertake a review of the **quality of the official population estimates.** This review will use research conducted after Census 2000 and will include an assessment of the population estimates at various levels of geography by various levels of demographic detail. This research will include a review of the population estimate models, the assumptions inherent in these models, and the use of administrative records data.
- Seasonality research is already underway to address concerns about possible biases introduced due to differences in the population defined by the ACS residence rules ("current") and the residence rules underlying the population estimates ("usual"). This research requires multiple years of data that are collected from the "seasonal residence" question that is currently asked as part of the ACS. Preliminary results based on 3-year estimates are scheduled for release this fall and can be shared with the advisory committees in our fall meetings. This work is designed to measure the degree of differences in the populations measured by these two sets of rules.
- The **usability of ACS data** will also be studied. Though desirable, from a consistency perspective, we need to better understand the user issues associated with having ACS estimates that may differ from the publicly released official population estimates.

All of this research work would need to be completed by mid-2007 to be used for weighting the first 3-year estimates in the spring of 2008. We invite the advisory committee to be active participants in this research effort. We will solicit ideas in developing the specific research methods and request your review of our research plans.

The Census Bureau acknowledges that the inflation adjustment issue deserves additional research and will investigate alternatives, if funding permits. We note, however, that geographic differences in inflation rates are not accounted for in most federal programs and guidelines. For example, neither the official poverty income thresholds nor the federal tax exemption for dependents uses such a distinction. Should the methodology for adjusting for inflation change, the Census Bureau will reconsider current practices. Until then, our position is that, while not perfect, using a national CPI to adjust for inflation is preferable to not adjusting at all.

Currently, the Census Bureau has very limited plans for researching multilevel modeling approaches in producing small-area estimates from the ACS data. One exploratory area has involved the use of ACS data in the Small Area Income and Poverty Estimates Program. Depending on the effectiveness of using ACS data in conjunction with administrative data to improve the accuracy of these school district poverty estimates, more such research efforts could be considered.

Recommendation 11B

Methodology for the Production of ACS Multi-Year Estimates

American Marketing Association Advisory Committee

"In the opinion of the AMA/AC, the decisions that have been made by the Census Bureau seem sensible. However, these are empirical issues, and the decisions should be based on empirical analysis (as well as any superordinate objectives), not on opinion.

We continue to have concerns about the planned control procedures, as we indicated when this issue was previously discussed by the CACPA. It is not clear to us that these controls, will reduce as opposed to increase bias in local estimates. We do, however, appreciate the desirability of matching current population estimates."

Census Bureau Response

We agree with the recommendation that more empirical analysis is needed to inform the decision process on the use of population estimates as controls in the ACS weighting process. Our research priorities in 2004 and 2005 involved resolving weighting and estimation issues critical to the production of single-year estimates in 2005 for the United States and Puerto Rico and for the production of single-year estimates in 2006 that reflect data collected from the population living in Group Quarters. For 2006 and 2007, our research plans include four major components that address issues relating to the use of population and housing controls. They include assessments of the accuracy (reliability and bias) of alternative weighting procedures, measures of the quality of the official population estimates, research to address seasonality implications, and usability research to assess the user issues associated with having ACS estimates that may be inconsistent with official population estimates. Each of these is described in more detail below.

- Alternative weighting procedures under consideration involve the use of housing controls and the use of population controls at alternative levels of geography (e.g., county, groups of counties, or state) and demographic detail (e.g., full detail, collapse some dimensions, or total population only). In order to assess the impact on the accuracy of ACS estimates from a mean squared error perspective, we would be measuring the impact on reliability (variances increasing or decreasing) and potential biases (sensitivity analysis or the use of other independent means).
- The Census Bureau will undertake a review of the **quality of the official population estimates.** This review will use research conducted after Census 2000 and will include an assessment of the population estimates at various levels of geography by various levels of demographic detail. This research will include a review of the population estimate models, the assumptions inherent in these models, and the use of administrative records data.

- Seasonality research is already underway to address concerns about possible biases introduced due to differences in the population defined by the ACS residence rules ("current") and the residence rules underlying the population estimates ("usual"). This research requires multiple years of data that are collected from the "seasonal residence" question that is currently asked as part of the ACS. Preliminary results based on 3-year estimates are scheduled for release this fall and can be shared with the advisory committees in our fall meetings. This work is designed to measure the degree of differences in the populations measured by these two sets of rules.
- One aspect of usability of ACS data will also be studied. Though desirable, from a
 consistency perspective, we need to better understand the user issues associated with
 having ACS estimates that may differ from the publicly released official population
 estimates.

All of this research work would need to be completed by mid-2007 to be used for weighting the first 3-year estimates in the spring of 2008. We invite the advisory committee to be active participants in this research effort. We will solicit ideas in developing the specific research methods and request your review of our research plans.

Recommendation 11C

Methodology for the Production of ACS Multi-Year Estimates

Population Association of America Advisory Committee

"The PAA/AC commends the Census Bureau on the design and development of the innovative American Community Survey.

- A. Given the critical role of the intercensal estimates as population controls, the PAA/AC recommends the Census Bureau complete a comparison by county level population estimates by age, race, and gender for April 1, 2000 and Census 2000.
 - This request is consistent with the Census Bureau's research tradition of quality evaluation and is of heightened interest to consumers of the intercensal estimates and the American Community Survey.
- B. The PAA/AC recommends that appropriate Census Bureau staff knowledgeable about the development of the intercensal population and housing estimates be available at all future CACPA sessions on the ACS.
 - ACS presentations often reference or raise questions about technical aspects of the intercensal population and housing estimates used as controls for the ACS. Participation of the estimates staff will allow CACPA members to better understand ACS controls and better advise the Census Bureau on ACS issues.

Furthermore, the PAA/AC recommends that a representative of the Population Estimates Branch make a presentation on its sub-national estimates and evaluations thereof as they relate to the use of such estimates by ACS for controls.

C. The PAA/AC recommends further discussion of the pending decision on weighting the ACS dollar data. This should include: the implications of cross tabulating population data pooled and averaged over the time period with dollar data anchored to the final year in the period and weighting ACS to the intercensal population and housing estimates.

The Census Bureau presented suggestions for identifying the geographic references and weighting the population and dollar data for multi-year ACS data. The suggestion to select the final year for the geographic reference was well received. The suggestion to conceptualize multi-year estimates as period estimates that reflect the characteristics of the entity over the entire data collection period is reasonable.

- D. The PAA/AC recommends that 3- and 5-year local area estimates of dollar-denominated variables be released in both inflation-adjusted and nominal (non-adjusted) form. If only inflation-adjusted estimates are to be produced, data users should be provided with guidance on how the nominal versions can be approximated.
- E. The PAA/AC recommends the production of research data sets for the ACS comparison sites for 3 year averages for 2000-2002, 2001-2003, 2002-2004, and 5 year averages for 1999-2003 and 2000-2004.

A current decision point is how to weight future 1, 3, and 5 year ACS estimates. We have data now that can help inform the final decisions and anticipate needed empirical research to answer questions of how 1, 3, and 5 year estimates vary for the same geographic area and when it is most appropriate to use each.

F. The PAA/AC recommends that the Census Bureau annually assess the adequacy of the ACS sample size for producing estimates of high quality.

As the Nation's housing stock has increased over 1.5 million units each year since Census 2000, it is critical to monitor the growth in housing units, preferably by jurisdiction, and adjust the ACS sample size to maintain the envisioned quality of the survey."

Census Bureau Response

A. We agree that it would be beneficial to have a thorough evaluation of the intercensal estimates. We have done an evaluation of the estimates of state and county total populations comparing the 1990 census-based estimates prepared for 2000 against the Census 2000 estimates and are working on making those results available. We are developing an evaluation of the 1990 census-based state and county characteristics compared with Census 2000 data and will share the results.

For the post-2000 period, we have additional data available and have changed the methodology we use to prepare the estimates by characteristics, but unfortunately, due to the unavailability

of the necessary input data, we were not able to employ the current method to prepare a set of 1990-based estimates to compare with Census 2000 data. We do agree that it would be desirable to develop methods to evaluate the current methodology prior to the 2010 Census and certainly welcome any recommendation the Committee would have as to methods to do an evaluation of the estimates without waiting for the 2010 Census.

- B. We agree with the recommendation that the Population Estimates Branch make a future presentation on subnational estimates and associated evaluations. We also agree to ensure that staff knowledgeable about the development of the intercensal population and housing estimates will be available at CACPA sessions on the ACS.
- C. The Census Bureau acknowledges that the inflation adjustment issue deserves additional research and will investigate alternatives. We note, however, that geographic differences in inflation rates are not accounted for in most federal programs and guidelines. For example, neither the official poverty income thresholds nor the federal tax exemption for dependents uses such a distinction. Should the methodology for adjusting for inflation change be changed(?), the Census Bureau will reconsider current practices. Until then, our position is that, while not perfect, using a national CPI to adjust for inflation is preferable to not adjusting at all.
- D. While there are several barriers to the feasibility and practicality of releasing multiple sets of dollar-valued estimates (i.e., inflation-adjusted and non-adjusted), we can explore what, if any, mechanisms could be developed and the associated materials to provide users guidance on how to approximate non-adjusted dollar-valued estimates.
- E. We agree with the recommendation on producing the series of multiyear estimates for research purposes. This work is underway with the expected release of research files in the spring of 2007.
- F. To implement the ACS sample design as intended (i.e., differential sampling rates by estimated number of occupied housing unit), we agree that it is critical to monitor the number of housing units by jurisdiction. However, it should be noted that the reliability of estimates is driven much more by the total number of housing units in the sample design (about 3,000,000) than by the size of the universe from which the sample is selected. So, to maintain the reliability of the ACS estimates, it is critical to maintain this sample design of 3,000,000 housing units.

Recommendation 12A

All About Jobs and More: Developments in Local Employment Dynamics

American Marketing Association Advisory Committee

"The manner in which data are delivered determines its usefulness for different constituencies and the ultimate utility of the data for the entire population. The Local Employment Dynamics (LED) data provide a good example of how delivery can enhance and limit the usefulness of data. The LED brings together data from a variety of sources and displays the data in a visually engaging manner that enhances the ability of the data to be used for on-the-spot decision making. For persons trying to get a quick oversight of an area's employment dynamics and for persons who must quickly respond to a natural disaster, LED's delivery is very appropriate. There are other constituencies, however, for whom the display is irrelevant. Instead, what they would prefer is to have the data in a much simpler form, possibly as a flat file, that they could then integrate into their own GIS system for further analysis. Integration of LED data with existing user databases may provide greater benefit than the present LED product.

The AMA/AC recommends that the Census Bureau develop a users' group committee for this new LED product so that the data may be of more benefit to more constituencies. The progress of the users' group should be monitored and evaluated as a vehicle for enhancing the utility of future, and existing, products."

Census Bureau Response

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n November 2005, The Brookings Institution hosted a data users' workshop to discuss ways to improve the applicability of the Local Employment Dynamics Quarterly Workforce Indicators. In January 2006, LED state partners and others convened for the LED Annual Workshop. Participants in both workshops will be invited to join the users' group.

Many users want data files, and it is our practice to make them available, by downloading from the Web site, through the Census Bureau Research Data Centers, or on DVD.

The Census Bureau is exploring the establishment of an online users' forum, but has not reached a final decision.

Recommendation 12B

All About Jobs and More: Developments in Local Employment Dynamics

American Statistical Association Advisory Committee

"The ASA/AC is pleased to see the progress that has been made in developing this interactive web system and believes it has the potential for many useful applications. The ASA/AC recommends that the Census Bureau establish an outreach program to educate its various user communities about the availability of this new product."

Census Bureau Response

Beta testing of the "On the Map" tool concluded successfully, and the tool was officially released in early February. Outreach activities include the Web site announcement, multiple listserve notices, numerous presentations to a variety of interested groups, including the LED annual state workshop in January, and special activities, such as planned special events in some of the participating states. An e-learning module on this tool is now available at http://lehd.dsd.census.gov/led/index.html>.

We are actively working with offices responsible for planning the Base Realignment and Closings program. The "On the Map" tool makes consistent, comparable data available for many of the communities that will be affected.

Recommendation 13A

Coverage Measurement for the 2010 Census

American Statistical Association Advisory Committee

"The ASA/AC commends the Census Bureau's preliminary research on coverage measurement. The Census Bureau should investigate the performance of synthetic estimation in identifying small areas with high coverage errors. Some alternative model-based methods such as a composite method could be explored.

The ASA/AC recommends that the sample design of the coverage measurement program be reviewed for improvement. From a statistical design perspective, it would be better to oversample areas that have a higher likelihood of undercoverage (as opposed to a proportionate design).

The ASA/AC recommends the Census Bureau clarify the definitions of omissions and erroneous enumerations that it will use in 2010. If testing shows that it is too difficult to accurately determine Census Day address, the Census Bureau should adopt a more restrictive definition of coverage error as recommended by the ASA/AC in April 2004. Whatever definitions are chosen, the Census Bureau should communicate the relevant concepts clearly to users.

To address the issue of correctly allocating children to households, perhaps the coverage measurement team could partner with the Communications Planning Team and create a series of activities for the school component on the communication campaign that involves children and parents allocating children to households under different circumstances.

For the field component of the coverage measurement operations, special training and specific interviewing techniques should be adopted to ensure a higher degree of accuracy in the acquisition of data. This includes consideration of conversational and/or in-depth interviewing.

The Census Bureau shall consider conducting some targeted studies to measure specific sources of coverage error that it expects to be significant and to determine where there is scope for improving census operations in the future."

Census Bureau Response

We are conducting research on improving methods for estimation of coverage errors. This includes direct estimation and synthetic estimation, as well as measuring the errors of these estimates. Logistic regression models and random effects models are being investigated. Estimating coverage errors for small areas is important to the extent that this information is useful in identifying census operations that could be improved. Our major challenge is estimates for areas or groups that will be useful in planning the 2020 Census.

- 1. While we have proportionately allocated samples to states for the 2010 Census, disproportionate sampling will be considered for the allocation of a sample within each state. (A state sample allocation was needed at this time for purposes of planning and developing the field infrastructure to support coverage measurement.) We will, however, proceed cautiously with any disproportionate sampling. In order for this to be effective, we must identify a variable that is highly correlated with coverage error and stable over time, otherwise resulting sampling variability would adversely affect all coverage estimates. The final sample design is not yet complete.
- 2. Our current strategy is to estimate the components of coverage error, specifically omissions and erroneous enumerations, at the national level and for some census processes. We are also interested in component errors by geographic characteristics, such as "wrong county and right state." This requires that we determine the location of a person's Census Day Residence. This is an important component of the 2006 measurement test. Our number one priority for the 2006 test is an evaluation of Census Day Residence determination. The study plan is available upon request.
- 3. The suggestion about partnering the Coverage Measurement Team with the Communications Planning Team to address issues related to allocating children is an interesting idea. We are currently working on a "Census in Schools" program, in the hopes of reaching adult respondents through school-age children. This program is part of our overall 2010 Communications Plan.
- 4. We recognize the importance of the coverage measurement field activities. The scripted interview for 2006 attempts to better explain the goal of the interview. We use statements such as "We want to include people who live here all the time and people who stay here often, even if you don't think of them as members of your household" and "Did you spend even one night in any of these types of places around April 1?" that were shown in cognitive testing to more clearly convey the goals of the questions and the survey. Additionally, the 2006 instrument is more in-depth than the 2000 instrument because it has more probes on other people who should have been counted there at the residence and other places where a person might have been counted. We also have plans to conduct a conversational style in-depth interview as part of the 2006 evaluation of Census Day Residence determination.
- 5. The Census Bureau has conducted a preliminary study to measure the enumeration status of census records that have traditionally been classified as insufficient information for matching for net error estimation. These records have been treated as erroneous

enumerations for net error. For measuring component errors, some of these would likely be valid enumerations and should be considered as such. The Census Bureau has also done cognitive studies to improve questions used to collect data for determining a person's Census Day Residence status and is planning a conversational-style interview as part of the 2006 coverage measurement evaluation. See response number 5 above. Note also that the cognitive testing focused mostly on people with multiple addresses and people with mobile household members. This led us to assess and revise our questions so that we could increase the ability of the instrument to accurately classify people in more complex situations. We are also conducting a random-digit-dialing experiment to test two alternative questions to be used to classify residency for people with more than one address. This is a targeted study to examine a particular set of questions.

Recommendation 13B

Coverage Measurement for the 2010 Census

Population Association of America Advisory Committee

"The PAA/AC submits the following:

- A. The PAA/AC recommends that the Census Bureau develop hypotheses about the segments of the population and geographic areas that have been subject to undercounting or overcounting in past censuses and that these hypotheses be used to guide Census Coverage Measurement (CCM) tests in the run up to the 2010 Census.
 - For example, past evidence shows that children under 9 years of age may be over-counted. This could be turned into a hypothesis in a CCM test using 'over-sampling' of the areas where high proportions of households with children under 9 years of age. If the test supports the hypothesis, then over-sampling should be used for this same segment in CCM 2010. This same approach can be used with other population segments and geographic areas.
- B. The PAA/AC recommends that the Census Bureau consider enhancing the coordination between the CCM program and the Office of the Assistant Division Chief for Planning and Outreach, Decennial Census Division, such that information from the CCM tests in the run up to 2010 is used to inform strategies and materials for reaching population segments and geographic areas where tests supported the hypothesis that they were subject to over or under counting.
- C. The driving force behind the testing leading up to the 2010 CCM Program and the 2010 CCM Program itself is "lessons learned" from past censuses and tests. Yet, evidence suggests that the 2010 Census may be conducted under circumstances quite different than those from 1950 to 2000, particularly in terms of the number of immigrants and undocumented aliens and their native languages.

Therefore, the PAA/AC recommends that the Strategic Planning and Innovation Group should consider various effects these changes could have on CCM and relay its findings to

- the CCM group with any recommendations that may be appropriate for revising aspects of the 2010 CCM program.
- D. The PAA/AC recommends that the detailed plan for the 2006 coverage test be distributed to the PAA/AC committee along with the general plans for CCM tests in the run up for 2010."

Census Bureau Response

Although we would like to better understand the nature and characteristics related to undercounting or overcounting, the Census Bureau must first improve its measurement of these concepts. Improving our methodology for determining Census Day Residence is the major objective of the 2006 Coverage Measurement Test. We will evaluate whether new methodology is effective at ascertaining a person's Census Day Residence. Because the census site tests are not representative samples of the United States, there would be considerable limitations with any hypothesis testing. In 2010, we will, however, consider the possibility of some disproportionate sampling within states if potential risks with an increased sampling variance can be overcome. See Census Bureau response number 2 above for further explanation.

- 1. The Census Bureau strongly concurs about the importance of coordination between the coverage measurement program and all census programs. However, results from the CCM tests are unlikely to be available in time for CCM to have a major impact on the 2010 Census plans. The CCM results will be used to plan for the 2020 Census.
- 2. We strongly agree that the CCM must keep abreast of how the census will be conducted. This is particularly relevant because the major goal of CCM in 2010 is to provide useful information that can be used to improve the quality of future censuses. This implies understanding how sources of coverage error may be related to census processes.
- 3. Detailed plans for the 2006 Census Coverage Measurement Test are currently being prepared and will be shared with advisory groups as they are completed.

Recommendation 14

The Hispanic Origin Question

Population Association of America Advisory Committee

"The PAA/AC is concerned about a lack of parallelism or consistency between the race and Hispanic origin questions. While the race question allows individuals to indicate more than one race, such as white and black, the Hispanic origin question does not permit individuals to indicate both Hispanic and non-Hispanic origin. This is increasingly unrealistic given the sizable intermarriage rate of US-born Hispanics. The results of Hispanic origin data collected under current rules will ultimately lead to a very misleading picture of ethnic change in the nation's population."

Census Bureau Response

The issue of collecting multiple responses to the Hispanic-origin question was first raised in *Federal Register Notice No. 15* by the Office of Management and Budget (OMB) in October 30, 1997.² In the notice, OMB recognized the importance of allowing individuals to select both "Hispanic origin" and "Not of Hispanic origin" for diversity reasons. However, because of the lack of research in this area and concerns about the possible impact of any change on the quality of the origin data, the provision to allow respondents to select both "Hispanic origin" and "Not of Hispanic origin" was not included in the 1997 standards. Thus, the current OMB guidelines on Race and Ethnic collection suggest that respondents must be classified into one origin response category.

The OMB suggested further research on multiple-response reporting to the Hispanic-origin question. The Census Bureau responded to OMB and released Working Paper #77.³ The Census Bureau plans to study the reporting of more than one origin to the Hispanic-origin question in the future. However, at this point, it would not be possible to design, test, and analyze a question to elicit multiple responses on Hispanic origin and get approval from OMB in time for the next decennial deadlines for the 2008 ACS.

²Please see "Revisions to the Standards for the Classifications of Federal Data on Race and Ethnicity. Federal Register: October 30, 1997" at the following Web site: www.whitehouse.gov/omb/fedreg/1997standards.html>.

³Please refer to Working Paper #7i7i, "Analysis of Multiple Origin Reporting to the Hispanic Origin Question in Census 2000" by Roberto R. Ramirez at the following Web site: www.census.gov/population/www/documentation/twps0077.html>.

Recommendation 15A

Previous Recommendation – Proposed Methodology for ACS Estimates

Population Association of America Advisory Committee

"The PAA/AC resubmits the following recommendation made as a result of the April 21-22, 2005 CACPA meeting:

The re-submission relates to the proposed methodology for ACS estimates. This methodology involves an important role for intercensal housing unit and population estimates released each year by the Census Bureau. The PAA/AC is concerned that the different residence rules employed by the ACS and the Decennial Census may lead to inconsistencies between the ACS and the intercensal estimates, with gross and subtle implications for the ACS estimates published for various levels of geography.

The PAA/AC believes that the state-level evaluation that the Census Bureau proposes with regards to evaluation of differences in American Community Survey and Census residence rules is inadequate. We repeat our previous recommendation that comparisons between ACS data and Census 2000 Data for local areas on characteristics such as age, race, poverty rates, and average household size be made to assess the potential impact of different residency rules on coverage and accuracy of data. This is an especially critical factor in data quality as more people living in the United States own second homes and become increasingly mobile."

Census Bureau Response

The Census Bureau would like to clarify the intent of our evaluation on seasonal residence. Our evaluation is designed to utilize multiple years of data (2003 - 2007) in order to produce results below the state level. To accomplish this, we intend to release results in the spring of 2006 that use three years of data from the 2003, 2004, and 2005 ACS.

Comparisons of ACS and Census 2000 characteristics have been conducted. The Census Bureau released six detailed reports and sponsored an additional set of four reports that compared ACS and Census 2000 data for characteristics such as age, race, poverty, and average household size. These results are on the ACS Web site under the ACS Report Series.

Recommendation 15B

Previous Recommendation – Proposed 2010 Census Residence Rules

Population Association of America Advisory Committee

"The PAA/AC resubmits the following recommendation made as a result of the April 21-22, 2005, CACP meeting:

The ACS currently uses a two-month residency rule, whereas the decennial census uses the concept of 'place of usual residence.' The PAA/AC members believe that using two different sets

of rules is likely to cause data from the ACS to be inconsistent with the Decennial Census results and intercensal population estimates for many places.

Under the assumption that the major differences between ACS and Decennial Census residency rules can cause differences in results, we urge the Census Bureau to continue collecting data that can be used to test these differences. A test should be done as soon as possible. If there are significant differences in a substantial number of places, we believe that ACS should adopt the same residency rules used in the Decennial Census.

In addition, the PAA/AC urges the Census Bureau to collect information on secondary places of residence in the ACS (e.g., 1-6 or 2-6 months per year). We believe these data will be extremely helpful for understanding residency issues and mobility patterns and will lead to more accurate population counts and estimates."

Census Bureau Response

In our previous response to this recommendation, we acknowledged that the difference in the ACS and the 2010 Census residence rules could lead to differences in estimates in some areas. We stated previously that since 2003, we have been collecting data in the ACS on seasonal residency that will allow us to assess the degree to which small areas are affected by this difference. Our current plans are to continue collecting these data at least through 2007 in order to produce multi-year estimates for increasingly smaller geographic areas. The test that you have requested is underway, and we have been collecting the necessary data since 2003. Three-year estimates (based on 2003, 2004, and 2005 ACS data) are expected this spring, and the results will be shared with all committees of the CACPA. Five-year estimates (based on 2003, 2004, 2005, 2006, and 2007 ACS data) will be produced in the spring of 2008.

While the PAA/AC and the Census Bureau share an interest in data on secondary places of residence, this topic is not planned for inclusion on the ACS—a mandatory survey. As with all new content determinations for the ACS, a proposal to add this question to the ACS must be made through the Office of Management and Budget for consideration.

Recommendation 15C

Previous Recommendations

Population Association of America Advisory Committee

"The PAA/AC is concerned that some previous recommendations made as a result of the April 21-22, 2005, CACPA meeting were not going to be considered because survey instruments were already printed (see Census Bureau response to Recommendation 6C, 'Census Bureau responses to the recommendations of the Census Advisory Committee of Professional Associations made as a result of the meeting on April 21-22, 2005, page 10)' or 'because of schedule and design considerations' (see Census Bureau response to recommendation 13C, 'Census Bureau responses to the recommendations of the Census Advisory Committee of Professional Associations made as a result of the meeting on April 21-22, 2005, p. 25).' Time and effort expended on developing these recommendations could have been better utilized.

The PAA/AC recommends that, to avoid similar situations in the future, agendas for future meetings of CACPA should be set in such a way that if an operation is already in progress, the Census Bureau provide an update and not ask for advice that cannot be considered."

Census Bureau Response

It is the Census Bureau's objective to ask for advice only while there is time to consider your recommendations; however, there are occasions when unexpected timing constraints prohibit consideration of Committee input.